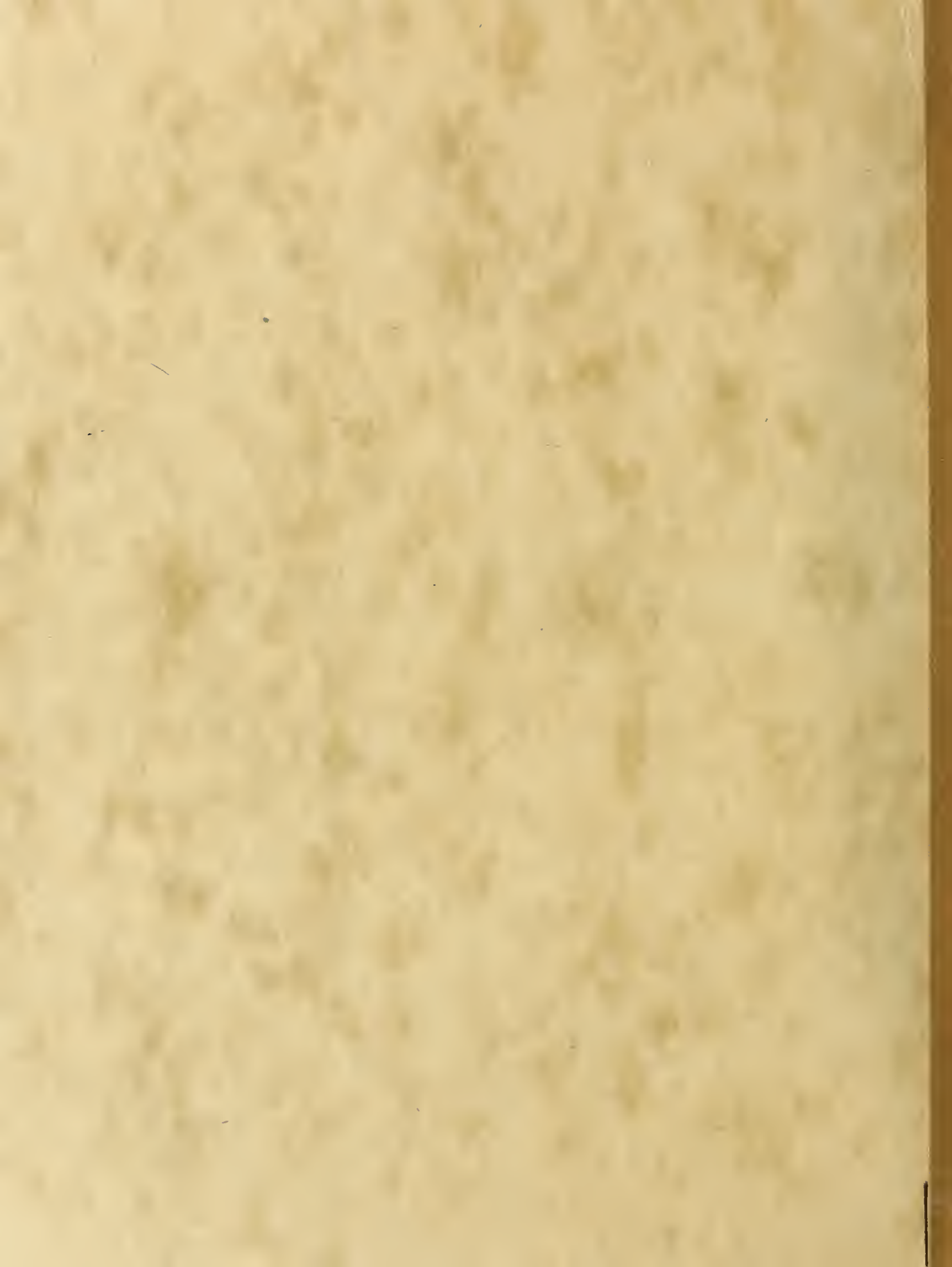


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FINAL REPORT



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Group Effectiveness Research Laboratory

DEPARTMENT OF PSYCHOLOGY · UNIVERSITY OF ILLINOIS · URBANA, ILL.

AD_____

FINAL REPORT

FRED E. FIEDLER
UNIVERSITY OF ILLINOIS
PRINCIPAL INVESTIGATOR

DECEMBER, 1968

SUPPORTED BY
U. S. ARMY MEDICAL RESEARCH
AND DEVELOPMENT COMMAND
WASHINGTON, D.C. 20315

CONTRACT DA-49-193-MD-2060

UNIVERSITY OF ILLINOIS
URBANA, ILLINOIS 61801

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Final Report

Fred E. Fiedler
University of Illinois
Principal Investigator

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Final Report

December, 1968

Abstract

This project was initiated September 1, 1959 and terminated December 31, 1968. In the course of the nine years of its operation, the project has resulted in 29 technical reports and, as of this date, twelve publications in edited professional journals; four additional journal articles are submitted or in press.

The project has led to four series of programmatic studies. One of these was methodological in nature and dealt with the development of more meaningful interpersonal perception measures. One program led to the conclusion that task-relevant competition among small face-to-face teams increases cohesion and therefore personal adjustment of team members. Two experiments dealt with reactions of individuals to various conditions of stress, in negotiation situations as well as in experimentally induced stress arising from within the team and from external sources.* These led to a fourth series of studies on culturally induced stress which resulted in the development and test of culture training programs for Central America and Thailand designed for military personnel assigned to overseas duty. The Thai programs are now being used or field tested in Thailand by military units. The culture assimilator program for Central America has been field tested in cooperation with a volunteer public health organization and it is now in use. More important than the particular training programs which are ready for use, is the methodology which will enable the military services to produce and utilize such training programs in the future.

*These two studies also provided the impetus of a large program of research continued under the direction of Professor J. McGrath, under the auspices of AFOSR.

Final Report

December, 1968

This project was initiated on September 1, 1959 at the University of Illinois. It was designed to investigate the relationship between interpersonal perception and the individual's adjustment and effectiveness in small groups. Studies conducted under a previous contract (September 1954-1958) showed that perceptions of similarity among group members resulted in improved personal adjustment. The present program of research extended the earlier work by determining how the adjustment and task effectiveness of group members can be improved (a) by experimental manipulation of interpersonal attitudes, (b) by modifying situational factors, and (c) by culture training programs.

As of this date, work under this project has resulted in 29 technical reports as well as twelve journal publications; four papers are in press or have been submitted. The contract employed 19 research assistants, eight wrote their Masters theses, and five their doctoral dissertations on work sponsored or related to this contract. The project involved two methodological and 15 substantive studies. The former (of secondary importance to the project's aims) were designed to develop improved measures of interpersonal perception and new methods for experimental manipulation of interpersonal perceptions as well as research on intercultural training.

The substantive studies can be divided into three main groups: The first group extended the work performed under a previous contract with the

Office of the Surgeon General (DA-49-007-MD-569); the second group dealt with the effects of intergroup competition on performance and adjustment; the final group of studies concerned the development of training devices and organizational procedures which would minimize deleterious effects on adjustment of American personnel assigned to overseas duty.

Making Organizations Adjustive

Individual adjustment in task groups is seen to be a function of three interdependent sets of variables: (a) personality characteristics of the individual himself; (b) the quality of the interpersonal relationships which he develops with the people around him; and (c) the task and/or situational conditions under which the group must perform. Investigations in the present program primarily examined variables from the vantage points of (b) and (c).

Adjustive Interpersonal Relations

Interpersonal relationships which are conducive to the adjustment of the participating individuals have been labeled quasi-therapeutic. Fiedler, Hutchins and Dodge (1959) found such relations associated with perceptions of similarity among the members of small college and military groups. Group members who tended to perceive one another to be highly similar were both better adjusted, and they achieved a more favorable adjustment than did members who perceived one another to be quite dissimilar. Alexander and Drucker (TR No. 9)* experimentally induced perceived dissimilarity and similarity among the members of small discussion groups. Their finding, that those subjects who were perceived as dissimilar had lower adjustment,

*TR No. ____ indicates a numbered Technical Report. A date followed by author's name indicates a journal publication. Technical reports and articles are listed in the bibliography.

tended to corroborate the initial results of Fiedler, Hutchins and Dodge (TR No. 7, 1959). Dorothy Kipnis (1961) investigated the effects which perceptions of significant others have on the self-concepts of the perceivers. She found that an individual's self-evaluations are intimately related to his evaluation of his close friends and associates. Adjustive interpersonal relations thus were associated with positive perceptions of similarity to others as well as favorable perceptions of others.

Quasi-therapeutic Group Organizations

In line with these earlier findings, the basic rationale of the research on small groups has been (a) that positive and close interpersonal relations are therapeutic, that is, that they assist individuals to adjust more effectively; (b) that such relations would develop when members of a group feel that they share a common fate; and (c) that such conditions could be brought about by placing groups into situations in which they would experience moderate threat or pressure from the social environment. As one example, this would occur if the group were in competition with other groups. The group members, faced with the need to ward off a common threat from other competitive groups, would presumably close ranks, become more interdependent, and feel more closely bound together by the common goal, as well as by the threat which competition with the other groups poses.

The rifle study. The first study in the series was conducted by Myers (TR No. 12, 1962) with sixty ROTC rifle teams which participated in a "recreational rifle tournament." Thirty teams were assigned to a competitive condition in which they participated in six-team leagues; 30

otherwise matched teams were assigned to a condition in which competition was de-emphasized. Various adjustment measures were obtained throughout the five-week period of the tournament.

As hypothesized, we found that the men assigned to competitive teams increased in such adjustment measures as self-esteem, esteem for others, and a lessening of anxiety scores. Men in successful groups tended to increase in self-esteem whether or not their team was in the competitive condition. In non-successful teams, however, the men in the competitive condition improved while those in the non-rivalrous condition experienced a significant deterioration in adjustment scores.

Golf study with schizophrenic patients. A subsequent study, also by Myers (TR No. 14), was conducted in a Veterans Administration Hospital at Danville, using 24 two-men groups of schizophrenic patients. For patients in fairly good contact, we found that the men assigned to groups under competitive conditions improved in adjustment, while those assigned to non-competitive conditions failed to show improvement. Severely schizophrenic patients who were in very poor contact fared better under the non-competitive than the competitive conditions.

Combat engineer study. The hypothesis that competition among small face-to-face groups would be quasi-therapeutic was validated in a military setting in 1962. We conducted a field experiment involving three operational companies of a combat engineer battalion at Ft. Leonard Wood. The operation of one company was slightly modified so that training and work assignments were given to squads rather than to individual men, and so that the men

were rewarded and reprimanded as a group. Recreational activities also were changed so that the men participated in sport by squads whenever possible, as for example, in volleyball. The experimental modifications were so unobtrusive that none of the officers and men were aware that an experiment was being conducted.

The results of this study clearly showed that the adjustment of men in the competitive training situation increased while the adjustment of men in the non-competitive situations deteriorated or did not improve. Criteria of improvement were various self-esteem and self-report measures, anxiety scores, army morale scores, and sick call measures. The squad performance scores obtained in the course of a field test showed no differences between the experimental and control conditions. However, the experimental company was considered to be an outstanding "project company" on the post, and the entire battalion began to use intersquad competition in its training and work programs (Julian, Bishop and Fiedler, 1966; TR No. 19).

Engineer training regiment study. In order to determine whether the intergroup competition could be meaningfully established in situations in which there were no functional task groups, the research was extended to a training regiment. The men were assigned to this regiment after having completed basic training.

Competition was developed, insofar as possible, by assigning competitive tasks to squads. This turned out to be difficult in view of the basic training mission of the regiment. The cadre interpreted the competition

primarily as involving such activities as cleaning barracks and policing the area. The men perceived some of these attempts to develop competition as harrassment, and many responded negatively to the treatment. The study yielded expected results only when we controlled, by statistical methods, for the perceived harrassment. Then the intergroup competition yielded better adjustment scores than the non-competitive situation. This str y also indicated that the group performance of squads in the competitive condition was higher than in the non-competitive conditions. It suggested that the competition must be meaningful to the men, and that the best results are likely to be obtained in the context of normal functional activities in which the groups engage. It seems clear that the induction of competition should be focussed on aspects of military life which the men see as meaningful as a basis for evaluating them and their group performance (Bishop, Alsobrook and Fiedler, TR No. 20; Wearing and Bishop, 1967, TR No. 21).

Recommendations for Implementing the Results of the Program

The results obtained in this series of studies has been quite consistent in showing that the psychological adjustment of men in military units can be promoted by appropriate administrative measures. They show that these measures need not interfere with the primary mission of the units. In fact, the evidence suggests that the intergroup competition may increase the performance of the small units.

While the armed services have always encouraged competition as a means of motivating military unit performance, certain types of competition seem

to be detrimental to personal adjustment, and perhaps also to unit performance. Our research program suggests that competitive programs would be maximally effective if competition is promoted among small face-to-face groups of a size which permits every man to know and work with every other man; the size of the unit should be no larger than the infantry squad.

Competition between individual members of the same group increases the distance between men and it is, therefore, likely to inhibit group cohesiveness and the establishment of quasi-therapeutic relations characterized by positive and close interactions among the men.

The effects of competition between larger units, of platoon, company, battalion, or larger size, may well be useful for increasing the morale or performance of these large organizations, although we have no empirical evidence to support such a view. However, these large organizations are less likely to promote the quasi-therapeutic relations among the men which contribute to personal adjustment.

To recapitulate, the following specific recommendations are here submitted:

1. Competition should be encouraged among functional units the size of infantry squads but no larger than platoons.
2. The basis for establishing competition should be meaningful to the men. Competition implies evaluation and comparison of one group with other groups. The basis for comparing and evaluating groups should be performance of activities which are intimately related to the purpose of the group's existence. Infantry squads should be evaluated on their performance as infantry squads,

not on performance in bedmaking, kitchen police, or peripheral activities. Appropriate activities might be ability to perform as a unit, ability to deploy rapidly, performance on the rifle range or obstacle course, performance in sport and recreational activities where the squad can perform as a team.

3. There should be continuous emphasis on squad integrity. The squad leader should be charged with assigning men to various duties, the squad should, if possible, be given a name, or permitted to name its own vehicles, and the members of the squad should be rewarded and punished as a group, thus making them responsible for one another, and increasing their feeling of having a common fate.
4. Continued attention should be paid to the development of squad performance measures which will assure that the evaluation of squad (or similar unit) performance is considered accurate and fair by the men. Prizes and awards for outstanding performance in competitive activities should be awarded by the commander of the larger organization of which the unit is a part.

Negotiation Studies

Myers had investigated situational conditions which were conducive to the development of good interpersonal relations and high levels of adjustment. A study conducted by McGrath and Julian (1962; TR No. 16) focused on the task conditions which were presumably detrimental to the development of adjustive interpersonal relations. This study involved

negotiation groups composed of representatives from three campus religious foundations who met with an impartial chairman to develop unanimously endorsed solutions to a set of socio-political problems on which the three religious groups held widely differing views. In each of three negotiation sessions one representative of the religious groups was in a minority while the members of the other two religious groups were in essential agreement.

Results showed that the role differences among the group members were reflected in the pattern of interpersonal relations and attitudes of the members. Minority role incumbents tended to be less satisfied with their own performance, to enjoy the group experience less, to feel less comfortable in the group, and to be more intra-punitive in explaining their negotiation difficulties. These reactions by the minority role incumbents were also supported by the ratings of the other group members. All members tended to be rejected more when they were in the minority role than when they were in the majority role.

Similar attitudes were found among majority members in their descriptions of minority group members. In addition to role differences in adjustment, the average member's adjustment was found to be significantly related to both the group negotiation success in producing a high quality solution and inversely related to the level of interpersonal conflict which developed among the discussion participants. Although the minority role was felt to be somewhat less comfortable, individual member adjustment was primarily related to how effective the group had been in achieving a quality problem solution and more importantly how effective the group had been in handling

the differences of opinions which existed among the members. For those groups in which interpersonal hostility and conflict developed, member adjustment was relatively low regardless of how successful the group was in finding a solution to the problem (McGrath and Julian, 1963; TR No. 16).

The Management of Culturally Induced Stress

A natural extension of our work led to the consideration of methods which would reduce maladjustive reactions to stress arising from assignment of military personnel abroad. Transplantation from one culture to another is stressful. Studies comparing suicide, homicide, mental hospital admissions, and other indices of psychological disfunction for immigrants and for matched groups who remained in their native country, are quite unequivocal. All show the effects of stress and social strains which are imposed upon the individual who moves from one culture to another. Similar findings have been reported for "overseas Americans" who are on a foreign assignment.

This is of obvious consequence for the management of military personnel abroad, and it plays an especially important part for the individual who must work with nationals of another country by himself in relative isolation from his home base or military unit. An example is the military advisor or specialist who is assigned to a foreign unit, or who is "on loan" to another country. It is, however, a problem to a greater or lesser degree even when the individual remains a member of an intact unit. He no longer knows the language, he can no longer read the signs, he can no longer understand the customs, the gestures, and the underlying assumptions which govern his interaction with members of another culture. This is particularly

true of the individual who must work with members of a non-Western culture, and especially in the Far East, which differs radically from his own culture. A common response to this problem is "culture shock" which generally involves feelings of acute discomfort and anxiety, alienation, and varying states of depression which may become quite acute and disabling in some cases. Although most individuals manage the transition from one culture to another with no more than moderate discomfort, inconvenience, and occasional anxiety, it often involves a lessened ability to function effectively in work and social situations.

Development of Culture Assimilators

Our approach to this problem has been the attempt to develop training manuals which would enable the individual to become "inoculated" against the unexpected social situations with which he would have to deal abroad. These training programs, originally conceptualized by L. M. Stolurow, and named "Culture Assimilators," are self-instructional, programmed teaching devices in book form, which the individual peruses at his own speed. (Work on this problem was supported in part by the Advanced Research Projects Agency, ARPA Order No. 454, under Office of Naval Research Contract Nr 177-472, Nonr 1834(36).)

The development of these manuals involves a number of discrete steps, the most important of which are briefly enumerated below.

Construction of culture assimilators. The raw material for the manual is obtained by asking American and foreign nationals to relate critical incidents of encounters in the host culture which resulted in serious misunderstandings or poor work relations, or which changed the individual's

understanding or work relations with members of the host culture. These critical incidents are then classified and refined.

At the same time, American and host country nationals are asked to respond to a variety of semantic and role questionnaires to determine the areas on which the American and the host cultures diverge most radically in their definition and understanding of critical concepts. Thus, when an American is asked to tell the probable consequence of "love" he is likely to respond, "If you have love then you have: marriage, happiness, children, etc." A substantial number of Greeks, asked to respond similarly, answered ". . . if you have love then you have . . . death." This response, never found in American questionnaires, harks back to the folk culture which demands that a girl marry a person of her parents' choice. If she falls in love and has an illicit affair with someone it becomes her brother's duty to kill her. While this is an extreme example of culturally divergent concepts, it shows clearly that the underlying meaning of the word love differs for the American and the Greek.

Likewise, the American who is asked by his foreman to help in solving a difficult problem is likely to feel flattered and pleased. In other cultures, however, the worker would see this as an attempt on the part of the foreman to exploit him--"after all, the foreman and not he, is getting paid for solving such problems."

Selection of episodes. Based upon the classification of critical incidents and determination of critical differences in concepts and behaviors, episodes are then selected which best exemplify the cultural differences.

These episodes are ordered so that the trainee will be enabled to induce most effectively the culturally important differences, and to apply these to his own situation.

Feedback. After each episode the trainee finds a set of four alternative responses which indicate different interpretations of the incident. The trainee selects one of the alternatives and is then told to go on to a specific page. On the given page he is told whether or not his answer has been correct and he is given an explanation and rationale for the correctness or incorrectness of his choice. If he chose the incorrect answer, he is asked to go back to the episode and make another choice.

An example of an episode, from the Thai Culture Assimilator, is given below. This is an incident from among several dealing with behavior towards people with high status.

SAMPLE EPISODE FROM THAI CULTURE ASSIMILATOR

Page 22-1

Two American anthropologists were doing research in northern Thailand, and one day they were walking home past the school house just as school was dismissed. Usually the children would run and chase each other home with considerable laughing and shouting. This time, however, they formed an unusual procession by running as usual, until they came up behind the two Americans. The children then quieted down, following the Americans at a normal, casual pace. Soon all of the hundred school children were

stretched out in a long line behind the two Americans, and it broke up when the two Americans stepped aside into a farm entrance. The Americans were somewhat upset because they didn't understand the Thai children's behavior.

* * *

Page 22-2

How could the Thai school children's behavior be best explained?

1. The Thai children were making fun of the Americans behind their back.

Go to page 22-3

2. The school children were just playing a game similar to our follow the leader.

Go to page 22-4

3. The forming of a line behind the Americans was a sign of respect that the children showed to the Americans.

Go to page 22-5

4. The Thai children were curious about the Americans and wished to follow them without bothering them.

Go to page 22-6

* * *

Page 22-3

You selected 1: The Thai children were making fun of the Americans behind their back.

This is not a correct answer.

We are told that the "children quieted down," implying that they were more serious and therefore would not likely make fun of the Americans.

Try again.

Go to page 22-1

* * *

Page 22-4

You selected 2: The school children were just playing a game similar to our follow the leader.

Your choice is not correct.

From the American point of view this might be the case, but it is the explanation from the Thai viewpoint that we would like you to learn.

Go to page 22-1

* * *

Page 22-5

You selected 3: The forming of a line behind the Americans was a sign of respect the children showed to the Americans.

Correct! You have chosen the best alternative.

These children were showing their respect to adults. Thai children are given considerable freedom until they are about seven years old when they are expected to learn to conform to the generally established age-sex pattern of adults. The American anthropologists would be regarded as learned scholars by the people in the village and by these school children. These people have great respect for scholarship, and the children are expected to show their respect by quieting down and by not passing the Americans. It is the custom among Thai people that when several people walk together, the older persons always walk in front followed by the others, in descending age order. Go to the next episode.

Go to page 23-1

* * *

Page 22-6

You selected 4: The Thai children were curious about the Americans and wished to follow them without bothering them.

This is the wrong choice.

This may be true but it does not explain the formation of a line which is important in this incident. Sometimes this would be the correct answer but not this time.

Go to page 22-1

* * *

Theoretical Considerations

Before we discuss the validation studies, some theoretical developments should be noted.

Role differentiation. An article by Foa and Chemers (1967; TR No. 22) discussed the amount and type of role differentiation that occurs across and within social systems in a culture. Specifically, Foa and Chemers showed that members of the Arab culture (our first assimilator), in particular, and traditional cultures, in a more general sense, differentiate highly within a social system. Thus, the father behaves quite differently toward the son than the son behaves toward the father, the employer behaves differently toward his subordinate than the subordinate behaves toward his employer. In the United States, in contrast, and to a somewhat lesser degree in other western countries, the differentiation within social systems is relatively small, thus employers and employees address each other in rather similar manner; sons not only plead with their fathers but fathers occasionally plead with their sons; husbands and wives

take nearly equalitarian roles quite in contrast to the customs in more traditional cultures.

However, there is relatively little differentiation between social systems in traditional societies and considerable differentiation between social systems in western countries. Thus, the man who holds high status in the community because of his competence in one area is highly regarded by all members of the community. The lawyer or the doctor is paid deference by his mechanic as well as by the newspaper seller and the politician. In western countries, however, a man may be a highly respected professional person in his own field while he is to his mechanic just another customer, if not indeed a rather lefthanded dolt, who cannot even fix his own fan belt. This analysis has led to a rationale for determining the relative difficulty of an item. Moreover, these types of distinctions have been very useful in clarifying the construction of other manuals.

Concept of "loss of face." One of the more important problems facing Americans in Asia and the Middle East is how to provide constructive criticism as a means of producing more efficient performance. A study by Foa, Mitchell and Lekhyananda (TR No. 28, 1968) was run in which differences in reaction to personal failure between Western and Far Eastern cultures were explained by differences in cognitive organization. American students who had failed and some who had excelled were compared to similar Far Eastern students. American students reacted to failure by maintaining a low interrelationship among all the variables studied (the interpersonal failure message and intrapersonal cognitions about the self) indicating a somewhat flexible cognitive organization (e.g., "my work may be worthless, but that does not necessarily make me a worthless person"). The Far Eastern

students reacted to failure by showing a low relationship between the failure message and self cognitions, and a high, inflexible, inter-relationship among the self cognitions. Thus, in Western and Far Eastern cultures the same stimulus produces two almost opposite behavioral responses. This information was conveyed in the Thai training program.

Validation of Training Programs

An integral part of the research has been the validation of the Culture Assimilators. Where possible this has been done within the culture to which the Culture Assimilator is addressed. As a minimum, however, we have conducted laboratory experiments, using nationals of the prospective host culture, to obtain preliminary validation evidence. While the laboratory experiments are clearly insufficient to provide evidence for the effectiveness of the training procedures, they are useful in giving important information about the training and in ironing out methodological problems prior to the much more extensive field tests.

The Thai Culture Assimilator. This program consists of 101 incidents which (along with alternative responses and feedback) are contained in three books. Total time required for going through the Culture Assimilator is approximately four hours.

A laboratory study by Mitchell and Foa (TR No. 29) was conducted to evaluate a culture program prepared for Thailand. This study was a cross validation of a previous experiment by Chemers et al. (1966) which tested a Culture Assimilator constructed for the Arab Middle Eastern countries. This study compared the performance and interrelations between culture

assimilator trained and untrained American leaders and their Arab group members. While groups under trained and untrained leaders did not differ in performance, consistent differences were found on all adjustment measures favoring the culture trained leaders.

The Thai study by Mitchell and Foa involved 32 American ROTC cadets of a Special Forces Company who were matched according to rank, and then randomly assigned to two groups. The 16 men of one group received the culture assimilator program and the 16 men of the other group received the geography program.

Sixteen pairs of foreign students from the Far East participated in the study, one member of each pair being from Thailand. Each pair of foreign students worked with one culture-trained and one geography-trained American. The American's job was to supervise the construction of a toy building made by his team of two foreign students and to get the building constructed as quickly and as accurately as possible, although he himself was not permitted to work on the task. The materials used were the American Plastic Bricks set and the Kenner Panel and Girder set. These are toy building materials from which a number of different buildings can be constructed. The experimental situation was conceptualized as simulating the problems of a Western expert working in a developing country: the expert is usually better qualified technically than his local co-workers, and he is expected to train them in doing the job rather than doing it himself.

At the end of each session, a Thai observer, the American student, and the two foreign students completed an evaluation form. After every

second session, all but the Leader answered an additional rating form comparing the two American leaders. Since culture- and geography-trained Americans alternated in the sessions, this last rating amounted to a comparison of the two types of training, although the group participants did not know that they were making this type of comparison. Since there were two observers and two task orders possible, the design was counter-balanced to control for these possible combinations.

The results indicated that the trained leaders performed significantly better in the interpersonal area than did the controls as rated by the leaders, the observers, and the Thai team member. There were no significant differences for the efficiency ratings although the results were in the right direction for the same three participants mentioned above.

In both the efficiency and interpersonal area the non-Thai member of the group perceived little difference between the experimental and control leaders. These results indicated that a program for a specific culture might not easily be generalizable to other cultures even though these might also be Far Eastern.

In summary, then, the two laboratory studies indicated that the program was definitely successful in lessening interpersonal and adjustment problems occurring in heterocultural task groups. We are currently undertaking a number of field studies under ARPA auspices to test the effectiveness of the program in "real life" settings.

The Honduras Assimilator. This assimilator (Symonds et al., 1967) was developed on the basis of critical incidents obtained from young Americans who performed volunteer public health work in Central America in

1966 with "Los Amigos de las Americas" of Houston, Texas. The critical incidents for this training program were chosen in accordance with cultural role theory concepts and closely related to the work environment within which these young people would operate.

The validation study was conducted in summer of 1967 and involved 230 teenaged Los Amigos volunteers who were assigned to 91 groups, each of which operated in a village in Central America.

Prior to departure for Central America, 38 groups of Amigos were trained with the Culture Assimilator while 53 groups received no training or control treatment involving First Aid training. The participants completed self and ideal self descriptions questionnaires prior to departure and again upon their return. They also completed daily reports on their mood, state of health, feeling of accomplishment, and feeling of well being at the time. Comparisons were made for the first and the final (third) week of their overseas experience to determine whether they had gained or deteriorated in adjustment. Similar comparisons were made for self-ideal self descriptions obtained before and after the three-week experience.

The results of this study showed that the culture-trained group had gained in adjustment and that members of trained teams reportedly performed better than did those of the untrained teams.

This is, at this time, the most definitive test of the efficacy of the Culture Assimilator training. It is hoped that we will have the opportunity to obtain field data with the Thai Assimilator in the course of this year, as well as with a parallel program developed for Iran.

Recommendations for Implementing the Results of the Research

The systematic development of the culture assimilator programs has been described and preliminary testing of this manual has indicated methods that the Culture Assimilators aid in achieving better interpersonal adjustment of Americans in heterocultural task groups. It also appears that this better adjustment helps task efficiency in a field setting.

Field research, building on work conducted under our SGO contract, is now underway under a related ARPA contract. Results obtained to date lead us to believe that the Culture Assimilator will be a very efficient and useful method of training for intercultural task groups.

1. While further evaluation studies are essential, the Thai and Central American programs can now be administered to troops destined for overseas duty on an experimental basis. Evaluation scales have been developed and are attached to this report.

2. It is possible that Culture Assimilators will not be effective under all conditions. This needs to be carefully checked in follow-up studies. There is, however, no reason why these programs should not be used for orientation purposes or for supplementing current training methods, as well as for the emergency training for which the programs were originally designed.

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APPENDIX A
Evaluation Scales

FOR RESEARCH PURPOSES ONLY

[illegible]

Unit _____

General Adjustment Questionnaire

(Change format to third person for superior ratings)

Task Ratings (8-point scale)

We would like you to rate certain aspects of your work with the Thais.

1. How difficult has your job been?

very
difficult : : : : : : : : : easy
 1 2 3 4 5 6 7 8

2. How stressful has your experience been?

very
stressful : : : : : : : : : very
 1 2 3 4 5 6 7 8 relaxing

3. How much cooperation with Thais did your job require?

very
much : 8 : 7 : 6 : 5 : 4 : 3 : 2 : 1 : little

4. How hard has it been for you to get your ideas accepted by the Thais?

very hard : ₁ : ₂ : ₃ : ₄ : ₅ : ₆ : ₇ : ₈ : very easy

5. How successful have you been in your job?

very not very
successful : _____ : _____ : _____ : _____ : _____ : _____ : _____ : successful

8 7 6 5 4 3 2 1

6. How well have you liked your position and the responsibilities of your job?

very much : $\frac{\quad}{8}$: $\frac{\quad}{7}$: $\frac{\quad}{6}$: $\frac{\quad}{5}$: $\frac{\quad}{4}$: $\frac{\quad}{3}$: $\frac{\quad}{2}$: $\frac{\quad}{1}$: little

very not very
helpful : : : : : : : : helpful
 8 7 6 5 4 3 2 1

very true : $\frac{\quad}{8}$: $\frac{\quad}{7}$: $\frac{\quad}{6}$: $\frac{\quad}{5}$: $\frac{\quad}{4}$: $\frac{\quad}{3}$: $\frac{\quad}{2}$: $\frac{\quad}{1}$: not at all true

very not at all
true : $\frac{\quad}{8}$: $\frac{\quad}{7}$: $\frac{\quad}{6}$: $\frac{\quad}{5}$: $\frac{\quad}{4}$: $\frac{\quad}{3}$: $\frac{\quad}{2}$: $\frac{\quad}{1}$: true

very true : 8 : 7 : 6 : 5 : 4 : 3 : 2 : 1 : not at all true

very true : 8 : 7 : 6 : 5 : 4 : 3 : 2 : 1 : not at all true

very true : $\frac{\quad}{8}$: $\frac{\quad}{7}$: $\frac{\quad}{6}$: $\frac{\quad}{5}$: $\frac{\quad}{4}$: $\frac{\quad}{3}$: $\frac{\quad}{2}$: $\frac{\quad}{1}$: not at all true

Definitely
yes : 8 : 7 : 6 : 5 : 4 : 3 : 2 : 1 : no
Definitely

Name of Rater _____ Date _____

Unit _____

EVALUATION FORM FOR SUPERVISOR RATINGS OF SUBORDINATES

Evaluation of _____
Please print full name and rank

Please indicate to what extent each statement describes the man being evaluated.

1. He was well liked by all the Thais with whom he came in contact.

very true : _____ : _____ : _____ : _____ : _____ : _____ : _____ : all true
8 7 6 5 4 3 2 1

2. He made sure the feelings of the Thai members of the team were not slighted.

very true : _____ : _____ : _____ : _____ : _____ : _____ : _____ : all true
8 7 6 5 4 3 2 1

3. He insisted that all team members concentrate their efforts on doing the best job possible.

very true : _____ : _____ : _____ : _____ : _____ : _____ : _____ : all true
8 7 6 5 4 3 2 1

4. He was open to suggestions about changes in ways of handling various situations.

very true : _____ : _____ : _____ : _____ : _____ : _____ : _____ : all true
8 7 6 5 4 3 2 1

5. He often criticized poor work.

very true : _____ : _____ : _____ : _____ : _____ : _____ : _____ : all true
8 7 6 5 4 3 2 1

6. The Thais found him friendly and easy to talk to.

very true : _____ : _____ : _____ : _____ : _____ : _____ : _____ : all true
8 7 6 5 4 3 2 1

7. He was generally quite knowledgeable about the best way to get things done.

very not at
true : 8 : 7 : 6 : 5 : 4 : 3 : 2 : 1 : all true

8. He got along very well with the villagers.

very not at
true : 8 : 7 : 6 : 5 : 4 : 3 : 2 : 1 : all true

9. Considering the difficulty of his job, he accomplished a lot.

very not at
true : 8 : 7 : 6 : 5 : 4 : 3 : 2 : 1 : all true

10. His group was one of the most efficient.

very not at
true : 8 : 7 : 6 : 5 : 4 : 3 : 2 : 1 : all true

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13. ABSTRACT

This project was initiated September 1, 1959 and terminated December 31, 1968. In the course of the nine years of its operation, the project has resulted in 29 technical reports and, as of this date, twelve publications in edited professional journals; four additional journal articles are submitted or in press.

The project has led to four series of programmatic studies. One of these was methodological in nature and dealt with the development of more meaningful interpersonal perception measures. One program led to the conclusion that task-relevant competition among small face-to-face teams increases cohesion and therefore personal adjustment of team members. Two experiments deal with reactions of individuals to various conditions of stress, in negotiation situations as well as in experimentally induced stress arising from within the team and from external sources. These led to a fourth series of studies on culturally induced stress which resulted in the development and test of culture training programs for Central America and Thailand designed for military personnel assigned to overseas duty. The Thai programs are now being used or field tested in Thailand by military units. The culture assimilator programs for Central America has been field tested in cooperation with a volunteer public health organization and it is now in use. More important than the particular training programs which are ready for use, is the methodology which will enable the military services to produce and utilize such training programs in the future.

14. KEY WORDS

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